DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018403 Address: 333 Burma Road **Date Inspected:** 24-Nov-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 630 **OSM Departure Time:** 1500 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: John Pagliero **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** S.A.S. components

Summary of Items Observed:

The Quality Assurance Inspector (QAI), Scott Croff, was present at the Self Anchored Span (SAS) job site to observe the scheduled fabrication and welding of components for the SFOBB project. The following observations were made:

- 1) Backing Bar survey
- 2) Contract document review at Pier 7
- 1) The QAI was tasked with documenting the current condition of backing bars that are in place on the OBG field splices. The QAI photographed 2 locations, 7E/8E and 7W/8W, where holes through the deck plate (plate A) have been cut / burned through the edges of the backing bars. The QAI noted that there is a crack visible, adjacent to the burn through at 7W/8W. The QAI is aware that these conditions / repairs are pending the Engineer's approval. See the attached photos. During this research, the QAI had a conversation with the Quality Control (QC) Inspector John Pagliero. The QAI was informed of other locations of backing bar repairs / burn through. The QAI noted the information. The QAI relayed these photos to the QAI Lead Bill Levell. The QAI was then tasked with identifying additional and previously reported locations of burn through at backing bars. The QAI researched archived reports and photographs to locate additional information. The QAI also requested photographs and information from other QAI. This work was in progress at the end of the shift.
- 2) The QAI reviewed contract related documents including the submitted and approved Welding Quality Control Plan (WQCP) and approved revisions to the WQCP and newly issued ABFJV non-conformance reports. The QAI updated the records of the approved welders and inspection personnel, as currently approved by the Engineer.

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During the approved welder update, the QAI noted that the newly approved welders are only approved for using shielded metal arc welding (SMAW) and that the WQCP addenda did not include certifications for flux cored arc welding (FCAW). These welders were previously reported to be approved for welding with FCAW and the QAI contacted the QAI Robert Mertz for clarification. The QAI was informed that the welder's certifications for FCAW was no longer valid and they are only approved for FCAW. The QAI relayed these changes to the appropriate QAI.

The QAI completed the informal review of the contractor's weekly welding reports package # 37. The QAI noted that several documents appeared to be missing regarding final inspection and acceptance of welds. The QAI continued consolidating the information from welding report submittals to identify missing reports of inspections. The QAI also continued generating a weld specific tracking list from the contractor's welding reports. The QAI noted that at this time, the most recent formal submittal of welding reports is ending on 8-15-2010 and that 10 weeks of reports have been informally reviewed and are pending submittal by the contractor.





Summary of Conversations:

The QAI had general conversations with ABF and Caltrans personnel during this shift. The QAI Lead Bill Levell tasked the QAI to document the current condition of backing bars, as noted above. The QAI relayed the information regarding the backing bar conditions to the QAI Lead Bill Levell. The QAI also relayed the status of the submittal review to the QAI Lead Bill Levell. The QAI was not able to relay the submittal review status to the QC Inspector William Norris during this shift. Except as described above, there were no other notable conversations or observations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi, (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Croff,Scott	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer